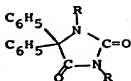




NOVEL FORMS OF 5,5-DIPHENYLHYDANTOIN EXHIBITING  
ENHANCED SOLUBILITY AND THE THERAPEUTIC USE THEREOF

ABSTRACT OF THE DISCLOSURE

Novel derivatives of 5,5-diphenylhydantoin, having the formula:



wherein R represents H or a member selected from the group consisting of -CH-R<sub>1</sub>; wherein R<sub>1</sub> represents a member selected from the group consisting of H, C<sub>1</sub>-C<sub>7</sub> straight or branched alkyl, -CCl<sub>3</sub>, -CBr<sub>3</sub>, -CI<sub>3</sub>, (CH<sub>3</sub>)<sub>2</sub>NCH<sub>2</sub>-, -CHO, -O-CH<sub>2</sub>- -CH=CH-, , , or ; wherein R<sub>3</sub> represents a member selected from the group consisting of -OH, halogen (Cl, Br, I), -OCH<sub>3</sub>, -COOCH<sub>3</sub>, -NO<sub>2</sub> or -OCOCH<sub>3</sub>; wherein X is -O-, -S-, or -N-; and wherein R<sub>2</sub> represents a member selected from the group consisting of -OH or -C(=O)-R<sub>4</sub>, wherein R<sub>4</sub> is a member selected from the group consisting of , wherein R<sub>3</sub> is defined as above, , , → O

the residue of any naturally occurring protein amino acid, the residue of any N-substituted amino acid, wherein said substituent is any amino acid protective group cleavable via hydrolysis or hydrolysis (e.g., formyl, benzyloxy, carbonyl, t-butyloxycarbonyl) or the residue of an N,N-C<sub>1</sub>-C<sub>5</sub>-dialkyl or C<sub>4</sub>-C<sub>7</sub> cycloalkylamino acid, or wherein R<sub>4</sub> is a member selected from the group consisting of -(CH<sub>2</sub>)<sub>n</sub>-C(=O)OH, -(CH<sub>2</sub>)<sub>n</sub>-C(=O)OCH<sub>3</sub>, -(CH<sub>2</sub>)<sub>n</sub>-C(=O)OC<sub>2</sub>H<sub>5</sub>, or -(CH<sub>2</sub>)<sub>n</sub>-C(=O)-N(R<sub>5</sub>), wherein n represents an integer of from 1-5 and R<sub>5</sub> and R<sub>6</sub> which may be the same or different represent C<sub>1</sub>-C<sub>5</sub> alkyl or together form a heterocyclic ring with the N atom to which they are attached (e.g., pyrrolidine, piperidine,

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